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09/809,408

03/15/2001

Jennifer Anne Dervin

IBM / 181

3577

7590

07/21/2004

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EXAMINER

CAO, CHUN

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 07/21/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/809,408

**Applicant(s)**

DERVIN ET AL.

**Examiner**

Chun Cao

**Art Unit**

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,14,16,23 and 25-28 is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,12,13,15,17-22,24,29,30 and 32-38 is/are rejected.
- 7) ☒ Claim(s) 8-11 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3,4</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Claims 1-38 are presented for examination.
2. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.
3. Claims 1-4, 6, 7, 12, 15, 17-22, 24, 29, 30 and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westwick et al. (Westwick), US patent no. 5,828, 836 in view of Fuchs et al. (Fuchs), US patent no, 5,590,277.

As per claim 1, Westwick teaches a method of restarting a node in a clustered computer system [fig. 1], wherein the clustered computer system hosts a group including first and second members that reside respectively on first and second nodes [fig. 1; col. 3, lines 49-57], the method comprising:

in response to a stop control message on the first node [controller 14A, fig. 1], notifying the second member of the group using the first member; and in response to the notification, initiating a restart of the first node using the second member [the host processor] [col. 6, lines 60-65; col. 7, lines 1-11].

Westwick does not specifically teach of detecting a clustering failure on the first node. However, as shown by Fuchs it is notoriously well known in the art to detect a clustering failure on the first node in order to provide a control message [col. 13, lines 10-15]. It would have been obvious to one of ordinary skill in the art to use the well known feature such as detecting a cluster failure to provide a control signal to the second member (the host processor). Therefore, the second member may initiate a restart of the first node in response the clustered failure.

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As per claim 2, Fuchs teaches the group comprises a cluster control group [col. 13, lines 11-12] that includes a member on each node participating in clustering in the clustered computer system [col. 13, lines 3-4], and wherein the first and second members are each members of the cluster control group [col. 13, lines 3-4].

As per claim 3, Westwick teaches of notifying the second member comprises issuing a membership change request to the group using the first member [col. 7, lines 1-11].

As per claim 4, Westwick teaches of issuing the membership change request includes indicating in association with the membership change request that the membership change request is for the purpose of restarting the first node [col. 7, lines 1-11].

As per claim 6, Westwick teaches of initiating the restart includes issuing a start node request to the group using the second member [col. 7, line 1-11].

As per claim 7, Westwick teaches of issuing the start node request includes indicating in association with the start node request that the start node request is for the purpose of restarting the first node [col. 7, lines 1-11].

As per claim 12, Westwick teaches of terminating clustering on the first node after notifying the second member of the group using the first member [col. 7, lines 1-11].

As per claim 15 recites the method which is the combination of methods as claims 1-4 and 6-7, therefore, it is rejected accordingly based on the rejection of claims 1-4 and 6-7.

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As to claims 17-22, 24, 29, 30, 32 and 33, Westwick and Fuchs together teach the claimed method of steps. Therefore, Westwick and Fuchs together teach the claimed apparatus and system to carry out the method of steps.

As to claims 34-38, Westwick and Fuchs together teach the claimed method of steps. Therefore, Westwick and Fuchs together teach the claimed program product to carry out the method of steps.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westwick et al. (Westwick), US patent no. 5,828, 836 in view of Fuchs et al. (Fuchs), US patent no, 5,590,277 and Huang (Huang), US patent no. 5,748,882.

As per claim 13, Westwick and Fuchs do not explicitly teach of selecting the second member from a plurality of members in the group to initiate the restart the first node. However, Huang teaches of selecting the second member [col. 5, lines 13-14] from a plurality of members [col. 4, lines 66-67] in the group to initiate the restart the first node [col. 23, lines 60-64]. It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Westwick and Fuchs and Huang because the specify teachings of Huang stated above would improve the overall performance of Westwick system by allowing to select a particular member to restart the first node.

***Allowable Subject Matter***

5. Claims 5, 14, 16, 23 and 25-28 are allowed over the prior art.

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6. Claims 8-11, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Applicant's arguments filed on 5/17/2004 have been fully considered but are moot in view of new ground(s) of rejection.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Chun Cao', with a stylized flourish at the end.

Chun Cao

July 14, 2004